

## ABSTRACT

PT Darma Henwa Tbk is a private company which engaged in coal mining contractor located on site of PT. KPC (Kaltim Prima Coal), Bengalon District, East Kutai Regency, East Kalimantan Province. PT. Darma Henwa requires overburden and coal production scheduling to achieve SR (stripping ratio) which has been set of 10:1. Method of problem solving is done by field research and secondary data processing. Re-assessment of the results of the study include: geological modeling, reserve estimation, mining pit design and coal production scheduling. The software used is Minex 6.0.3.

The results of the study are as follow:

- a) First Period overburden uncovered is 10,483,025 bcm and 1,096,684 tons of coal mined by stripping ratio of 10:1.
- b) Second Period overburden uncovered is 8,644,522 bcm and 1,005,770 tons of coal mined by stripping ratio of 8:1.
- c) Third Period overburden uncovered is 6,701,770 bcm and 1,025,165 tons of coal mined by stripping ratio of 6:1.
- d) Fourth Period overburden uncovered is 4,811,736 bcm and 1,111,307 tons of coal mined by stripping ratio of 4:1.

Total amount of overburden uncovered in 2012-2013 is 30,641,053 bcm, with coal production gained 4,238,926 tons, by the average stripping ratio (SR) of the entire mining period is 7:1. Therefore SR resulting from the study are in accordance with a predetermined magnitude is less than 10:1.

Digging equipments for overburden excavation are HITACHI EX-3600 with bucket capacity of 16 bcm, power shovel HITACHI EX-5500 and excavator EX-5500 HITACHI with bucket capacity of 19 bcm. Whereas, digging equipments for coal excavation are KOMATSU PC 1250-7 with bucket capacity of 3.8 tons and excavator KOMATSU PC 400 with bucket capacity of 1.4 tons. Hauling equipments of overburden and coal are dump truck TEREX MT 3300, KOMATSU 730E, KOMATSU HD 1500-7, LIEBHERR T 262, 255-5 HD KOMATSU, HINO Dutro and HD 130. Overburden disposals are on 2 (two) locations such as South Waste Dump (SWD) which is out pit dump located in the southeast of pit, and South In Pit Dump (IPDS) which is in pit dump located in the southwestern of pit. South Pit A's ROM Stockpile is located on the southwest of pit by distance about 3 km.